

HANDBOOK OF PHONOLOGICAL DATA  
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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625 Alawa	625 Alawa	625 Alawa
625 01 p [b] <sup>60</sup> (allo,free)	[g] <sup>60</sup> [c] <sup>62</sup> [j] <sup>60 62</sup>	[r-trill] <sup>64</sup> [r-flap-fricative] <sup>65</sup> [r-flap-voiceless] <sup>66</sup>
625 02 b-prenasalized <sup>30 31 32</sup>	10 g-prenasalized <sup>30 31 32</sup> [j-prenasalized] <sup>62</sup>	20 r-approximant <sup>03</sup>
625 03 t *[t-retroflex] [d] <sup>60</sup> (allo,free)	11 m	21 glottal stop <sup>34</sup> (limited)
625 04 d-prenasalized <sup>30 31 32</sup> *[d-retroflex-prenasalized]	12 n *[n-retroflex] [r-flap/n] <sup>63</sup>	
625 05 t-retroflex <sup>33 61</sup> (tag(+),allo) */t/ [d-retroflex] <sup>60</sup> (allo,free)	13 n-retroflex <sup>33 61</sup> (tag(-),allo) */n/	51 iota <sup>06</sup>
625 06 d-retroflex-prenasalized <sup>30 31 32 33 61</sup> (tag(+),allo) */d-prenasalized/	14 n-palatoalveolar <sup>02</sup>	52 e-mid <sup>35</sup>
625 07 c-palatoalveolar <sup>02</sup> [j-palatoalveolar] <sup>60</sup> (allo,free)	15 eng [n-palatal] <sup>62</sup>	53 e-mid-long <sup>07 36</sup> (limited)
625 08 j-palatoalveolar-prenasalized <sup>02 30 31 32</sup>	16 l *[l-retroflex] [r-flap/l] <sup>63</sup> (free,allo)	54 a [ash] <sup>67</sup> [alpha-unrounded] <sup>68</sup> (free)
625 09 k	17 l-retroflex <sup>33 61</sup> (tag(-),allo) */l/	55 iota-trema <sup>06 09</sup> [e-mid-trema] <sup>09 69</sup>
	18 l-palatoalveolar <sup>02</sup>	56 yod
	19 r-flap	57 w <sup>09</sup>

- 625 \$a Alawa \$d Australian \$e NC Australia (SE Arnhem Land) \$f 30 \$g Merritt Ruhlen \$g John Crothers (review)
- 625 \$a Sharpe, Margaret C. \$b 1972 \$c Alawa Phonology and Grammar \$f Australian Aboriginal Studies, No.37 \$g Canberra: Australian Institute of Aboriginal Studies \$q based mostly on one informant, with some consideration of other informants \$r four and a half months over a two year period
- 625 \$a BASE OF ARTICULATION \$A "When compared with most varieties of Australian English, one sees that for Alawa (as for many other Australian languages) the jaw is more open, and the lips more spread and lax. There is no rounding of the lips in Alawa, except very slightly for /w/. The tongue, when at rest, is convex to the roof of the mouth with the tip behind the lower teeth.... The effect of the rest position of the tongue can be seen in the allophones of the alveopalatal consonants. Unless these are contiguous to alveolar or retroflexed alveolar consonants, the tongue tip is behind the bottom teeth, and the tongue blade only is in contact with the alveolar ridge and palate; when these are contiguous to alveolar or retroflexed alveolar consonants (for which of necessity the tongue tip also is touching the alveolar ridge), the tongue tip also is touching the alveolar ridge in the alveopalatal position. The effect of the wider jaw setting can be seen in the alveolar and retroflexed alveolar consonants, in both of which the underside of the tongue is clearly visible. The wider jaw setting, and the consequent curling up of the tongue for both alveolar and retroflexed alveolar consonants, contributes a quality to vowels preceding these consonants which is similar to retroflexion. Therefore distinguishing between alveolar and retroflexed alveolar consonants is a little difficult." (p.13)
- 625 \$a FREQUENCY OF SOUNDS \$A Text frequencies include the following: Vowels: 46 percent; consonants: 54 percent; Vowels: a: 40 percent; e-mid: 8 percent; iota: 22 percent; iota-trema: 28 percent; Consonants: l: 10 percent; r-flap: 10 percent; n: 10 percent; k: 9 percent; yod: 8 percent; m: 5 percent; w: 5 percent; eng: 5 percent; p: 4 percent; n-palatoalveolar: 4 percent; l-retroflex: 4 percent; t: 3 percent. Other frequencies are also given on p.28-32.
- 625 \$a INTONATION \$A "There are three major utterance final intonation patterns: final statement, open statement, and question.. There is one other major phrase final but not utterance final intonation, the tentative pause. Two patterns, the normal narrative and continuous action, occur phrase medially.... Approximately five modifications of these patterns signalling

attitudes of the speaker have been noted... The final statement intonation... is basically that of a marked fall in pitch, and usually occurs at the end of a sentence.... The open statement pattern... is in basic form that of a strong phrase stress, followed by well spaced unstressed syllables of equal length (often almost as long as the stressed syllable), with a rise in pitch on the last few syllables of the phrase (the intensity... drops at the end of the phrase). The phrase often ends with a /glottal stop/.... The question pattern... has a rising pitch and never ends with a /glottal stop/. Rise in pitch is more constant over the phrase than in the open statement..., the pattern indicates a yes-no question (with no interrogative word present), though sometimes it appears to be used to indicate surprise rather than question.... Tentative pause..., at the end of the phrase, has a very slightly rising, level, or very slightly falling intonation. It occurs at the end of phrases which are often in themselves parts of grammatical sentences.... The normal narrative phrase medial pattern... has a succession of one or more slightly stressed words or syllables, separated by less stressed words or syllables.... The continuous action pattern... is manifested by a rise in pitch with strongly syllable timed rhythm, culminating in the lengthening of one syllable of a word for a varying length of time..., with maintained pitch and gradually falling intensity." (p.35-37)

- 625 \$a PHONOLOGICAL WORD \$A Words are up to seven syllables long. Vowel-initial syllables occur only word-initially. \$A initial C: all but /l-palatoalveolar, r-flap/ and retroflexed C \$A final C: all but prenasalized stops \$A final CC: /r-flap, l, l-retroflex, r-approximant/ + /k/; /r-flap, r-approximant/ + /p/; /r-flap, l/ + /eng/ (p.22ff)
- 625 \$a REDUPLICATION \$A "Reduplication of parts of stems and repetition of stems, either within the one phonological word or as two or more words, occurs in Alawa mostly to signal a grammatical or semantic distinction. A change in the initial consonant of the stem sometimes occurs in repetition of a stem within one phonological word. Repetition of verb roots occurs quite often.... A number of consonant clusters, other than those found to be possible word medially, would occur if these repetitions were considered to be one word. Such doublets or multiplets (up to four found to date) do have something in common with single phonological words, in that they function as a unit in syntax and only the final root is suffixed when the root functions as a substantive.... Two types of reduplication have been distinguished, the regular and the irregular. What is classed as regular reduplication, may not always follow a regular pattern..., but there is no alternation of stem initial consonants, and the meaning signalled is plurality (as contrasted with duality or singularity) for nouns, and intensification in quality for adjectives. When reduplication signals plural of nouns, the plural prefix is sometimes omitted. Reduplication does not always occur for plurals of nouns; it is apparently confined mostly to human nouns, and even then is sometimes omitted." For further details, see pp.53-55.
- 625 \$a STRESS \$A "Syllables tend to be evenly spaced within phrases, though phrases may differ in speed; syllables with phrase stress are longer than other syllables." "In the phonological phrase the basic stress pattern is that of a rapid build up of intensity on the first syllable, and a decay of intensity on the last one to three syllables, sometimes marked enough that a final syllable is almost inaudible or voiceless; syllables of approximately equal intensity intervene. Within words, the penultimate syllable tends to have slightly more stress, and within the phrase marked stress is heard on certain words, usually grammatically predictable." (p.14) "I tend to hear stress within words on the penultimate syllable of the stem of the word..., though I do not always hear it in this position. In two syllable stems stress always appears to be penultimate.... On three syllable stems stress is mostly on the penultimate syllable, though a large number is heard as having stress initial. On four syllable stems stress and secondary stress occur on the first and third syllables, it sometimes being difficult to decide which has more stress. On five syllable stems, stress tends to be heard penultimate or antepenultimate, with secondary stress on the first syllable." (p.34)
- 625 \$a SYLLABLE \$A (C)V(L)(C)
- 625 \$a VOICE QUALITY \$A "In voice quality there appears to be a marked lack of nasal tone, and considerable faucalisation.... The quality of Alawa voices is approximated with no difficulty by the Australian English speaker suffering from a cold and sore throat.... Laryngealisation is common at the end of intonation contours, and throughout phrases of certain intonation types. Pitch of voice is not markedly different from that of Australian English; if anything the timbre is deeper." (p.13)
- 625 02 \$A For the palatoalveolar consonants "the tongue tip is behind the bottom teeth, and the tongue blade only is in contact with the alveolar ridge and palate." (p.13)
- 625 03 \$A The author calls /r-approximant/ a glide. There are indications that /r-approximant/ is retroflexed, though the author does not state this. [MR] /r-approximant/ is "usually voiced, though sometimes only lightly." (p.15)
- 625 06 \$A /iota/ and /iota-trema/ are described as "lowered from cardinal [i]" or "[unrounded] [u]." (p.19)
- 625 09 \$A "There is no rounding of the lips in Alawa, except very slightly for /w/." (p.13) "All vowels are unrounded." (p.18) However, Sharpe uses phonetic symbols for rounded vowels, [u], [o], etc.

- 625 30 \$A "Word initially, prenasalized stops seem generally less common in the speech of women and younger people." (p.2)
- 625 31 \$A "Prenasalized stops are the only phonetically complex phones occurring phrase, word and syllable initially. For some features of the language, the level at which these phonemes are regarded as two segments is significant, yet in this description it is felt that they are reacted to as unit phonemes by the native speaker." (p.16)
- 625 32 \$A "Prenasalized stops contrast with devoiced stops word initially, and syllable initially following another consonant. Within a stretch of speech at normal speed when such a prenasalized stop occurs word initially following a vowel the nasal segment of the phoneme syllabifies with the preceding syllable, though in dictation of words giving syllable breaks this does not occur." (p.16)
- 625 33 \$A "In some...words, the retroflexed off-glide on the preceding vowel was marked enough to suggest that the retroflexed consonant was really a sequence of /r-approximant/ and an alveolar consonant." (p.17)
- 625 34 \$A /glottal stop/ occurs at the end of certain intonation patterns. For details, see p.34-40.
- 625 35 \$A "The phoneme /e-mid/ is not so easily contrasted with /iota/ and /a/, but in the light of the evidence it is regarded as a full phoneme. The phone [e-mid] occurs frequently in the present tense of auxiliary verbs.... In a count of about 1000 dictionary entries only about 30 words contained the phoneme /e-mid/.... In a count taken on running text, where /e-mid/ is more common, more examples of the phoneme /e-mid/ follow /l/ than follow any other phoneme.... It appears that [e-mid] has been developing from allophones of /iota/ and /a/ into a new vowel phoneme." (p.19-20)
- 625 36 \$A /e-mid-long/ "occurs in Barnabas's speech, substituting for 'iyu'...and for 'epe'...only in speech at normal speed," and only in two words. (p.20) [JHC]
- 625 60 \$A "Devoiced stops are perceived as voiced following nasals, in most other word medial positions, and in most word initial occurrences; they are usually voiceless word finally, and are occasionally aspirated in this position in a stressed word. Voiced and voiceless allophones freely fluctuate, but one or other allophone predominates according to the context mentioned." (p.15)
- 625 61 \$A "Ordinary alveolars, excluding the vibrant, have retroflexed articulation following a retroflexed consonant, and have retracted alveolar articulation elsewhere." (p.15)
- 625 62 \$A "Velars have palatal articulation contiguous to alveopalatal consonants or following the front vowels /iota/ or /e-mid/. They have velar articulation elsewhere." (p.15)
- 625 63 \$A "The alveolar continuants /n/ and /l/ may have flap onset syllable finally." (p.15)
- 625 64 \$A "The vibrant is mostly trilled word finally, and in over half the occurrences preceding another consonant..., it is flapped elsewhere." (p.15)
- 625 65 \$A "/r-flap/ tends to a fricative flap contiguous to /iota/." (p.15)
- 625 66 \$A "/r-flap/ may be voiceless syllable finally, and is often only lightly voiced intervocalically." (p.15)
- 625 67 \$A /a/ is realized as [ash] "following palatal consonants, except when this is also word finally." (p.19)
- 625 68 \$A [alpha-unrounded] "occurs infrequently fluctuating with [a] following velar consonants, and between retroflexed consonants (including /r-approximant/)." (p.19)
- 625 69 \$A [e-mid-trema] as an allophone of /iota-trema/ "only occurs contiguous to a liquid, alveolar semivowel [i.e. /r-approximant/--MRI, or palatal, or in one syllable closed syllable words. The predisposing factors appear to be especially: (a) a sequence /(u)(L)uLu/ where L stands for any liquid except /l-palatal/; (b) a syllable /CuLC/, where C stands for any permitted consonant; (c) a one syllable word ending in an alveolar or alveopalatal stop, or /r-approximant/." (p.19)(The author's "/u/" is described as unrounded, and thus coded here as /iota-trema/.)